National Seminar on Azolla and Algae Biofertilizers

7105. SHRI S. MADHAVAN: Will the PRIME MINISTER be pleased to state:

(a) whether the National Seminar on Azolla and Algae Biofertilizers for Rice, held at Tamil Nadu Agricultural University, has recommended to promote biofertilizers in rural areas and develop expertise on algae and azolla biofertilisers; and

(b) if so, what are the steps taken in this direction?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND THE MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE AND MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) and (b) Yes, Sir. The recommendations have been submitted to the concerned Ministries like Agriculture, Indian Council of Agricultural Research and Department of Biotechnology.

A mission-mode project for development of biofertilizers has been launched by the Department of Biotechnology.

Production of Biofertilizers

7106. SHRI RAMACHANDRAN PILLAI: Will the PRIME MINISTER be pleased to state:

(a) what are the findings of the studies conducted in making use of the technologies available for the large scale production of Bio-fertilizers viz. Blue Green Algae for rice and Rhizobio for oil seeds and leguminous crops; and

(b) what measures are being taken to educate the peasantry about the researches?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND THE MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE AND MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) Through the research and development, technology demonstration and training programmes, technology packages are available for large scale production of biofertilizers, i.e., blue green algae or rice and rhizobium for leguminious oil seeds and pulse crops. The conventional soil based production has been improved for BGA and agro-residue (carrier) based technology has been developed. Live liquid culture in polybags has been upscaled upto 20 litre. A novel seed coating methods for broadcasting has shown good results. Fermentation based production technology for reizobium has been developed and tried in the crops like chickpea mungbean, rajmash, and soyabean. Another technology package on exfoliated vermiculite has also been demonstrated.

(b) Training programmes for farmers, publications in local languages as booklets, hand-outs and publicity through Krishi Melas and audio-visual media have been used to educate the peasants. Demonstrations and field trials are conducted in the farmers fields. These help in creating awareness.

हिमाचल प्रदेश में मौसम विज्ञान केन्द्र स्थापित किया जाना

7107. **श्री महेश्वर सिंह :** क्या प्रधान मंत्री यह बताने की कृपा करेंगे कि :

(क) क्या यह सच है कि देश के सभी राज्यों की राजधानियों में इस समय मौसम विज्ञान केन्द्र कार्यरत है जो कि कृषि, बागबानी, पर्यटन इत्यादि के लिए अत्यन्त महत्वपूर्ण सिद्ध हुए है ;

(ख) क्या यह भी सच है कि हिमाचल प्रदेश में इस प्रकार के केन्द्र की स्थापना नहीं की गई है और मौसम के बारे में पूर्वानुमान की घोषणा चण्डीगढ़ से की जाती है जोकि प्राय: गलत सिद्ध होती है जबकि इसकी तुलना में श्रीनगर से विशेषकर चम्बा और कुल्लू जिले